LOCAL GOVERNMENT ENERGY LOAN PROGRAM

A PUBLIC/PRIVATE PARTNERSHIP
OF THE

ALABAMA DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS

ENERGY DIVISION

ADECA
Alabama Department of Economic and Community Affairs
Energy Division

and

ALABAMA ELECTRIC COOPERATIVE
(PowerSouth)

Revised December 2013

Table of Contents

ALABAMA DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS
Energy Division

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INTRODUCTION

Many government and educational entities are faced with budget restraints and do not have funds to upgrade equipment and/or buildings for energy efficiency. In order to advance energy efficiency for these organizations, the Energy Division of the Alabama Department of Economic and Community Affairs (ADECA) has established a revolving, low-cost energy loan program. Through a public/private partnership with PowerSouth (a wholly owned subsidiary of Alabama Electric Cooperative), the Local Government Energy Loan Program (LGELP) is available to local government entities, K-12 public school systems, and public colleges and universities throughout the state of Alabama. All closing costs are included in the loan and it is anticipated that the loans can be repaid from energy cost savings, making them an attractive option for financing energy efficiency improvements.

OVERVIEW

The LGELP enables these public entities to receive a low cost loan for energy efficiency improvements and retrofits of buildings, water treatment plants, street lights, traffic signals and sports field lighting, as well as fleet vehicle conversions for compressed natural gas (CNG), liquefied natural gas (LNG) and propane. In addition, the incremental cost of a new dedicated or bi-fuel CNG, LNG or propane vehicle over the cost of a traditional fueled vehicle is eligible for the program. The costs for fueling infrastructure are not covered. Ethanol (E85) projects may be considered upon request and will be reviewed on a case by case basis. The maximum loan amount is $350,000 for local governments, and public colleges and universities. K-12 schools may request up to $350,000 per campus not to exceed $500,000 per school system. The minimum loan amount for all projects is $50,000. Energy audits and closing costs may be included in the loan amount. The loan interest rate is currently set at zero percent (0%). The interest rate will not be changed

during the life of the loan. A three percent (3%) management fee is assessed for each approved loan.

ELIGIBILITY

- Municipal and county governments, public K-12 boards of education, colleges and universities in Alabama are eligible to apply for loans through the LGELP.

CRITERIA

The criteria for participation in the LGELP are as follows:

- The property must be owned by the entity applying for the loan.
- If a building is being retrofitted, the building must include a heating system, cooling system, or both.
- Recipients must agree to repay the loan with regular interval payments throughout the loan period.
- Energy efficiency measures for buildings, water treatment plants, streetlights, traffic signals and sports field lighting projects must demonstrate an average simple payback period of 10 years or less.
- Alternative fuel vehicle projects must demonstrate a simple payback period of five years or less.
- Each energy efficiency measure must have a useful life of at least equal to the length of the estimated payback period.
- Recipients shall warrant that all work or construction performed with the proceeds of a loan under this program shall comply with all building codes and standards.
- Alternative fuel conversion projects must be completed by a Qualified System Retrofitter and meet all standards instituted by the U.S. Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA). *For more information regarding vehicle conversions, refer to the EPA Alternative Fuel Conversion website (www.epa.gov/otaq/consumer/fuels/altfuels/altfuels.htm). You can search for EPA-certified conversion systems on this website under the EPA-Compliant Conversion Systems sub-heading. The conversion systems on*

these lists have been certified by EPA as meeting applicable emission standards and are exempt from the Clean Air Act tampering prohibition.

BENCHMARKING

Each building, water treatment plant, street or sportsfield lighting system included in the project must be benchmarked using the ENERGY STAR Portfolio Manager program. ENERGY STAR Portfolio Manager is a helpful tool in tracking energy savings in your buildings. To set up a Portfolio Manager Account, please refer to the **ENERGY STAR Portfolio Manager Start-Up Guide** which provides step-by-step instruction. An electronic copy of the **ENERGY STAR Portfolio Manager Start-Up Guide** can be found at http://www.adeca.alabama.gov/Divisions/energy/Pages/default.aspx.

ENERGY AUDITS

Projects for buildings, water treatment plants and lighting systems will require an energy audit of the facilities proposed to receive retrofits. The audit must identify and specify energy savings and related cost savings that are to be realized as a result of modifying operations and maintenance procedures, or by acquiring and installing one or more energy efficiency measures. The simple payback period will factor highly in the approval process. The energy auditor must be either 1) a registered Alabama engineer, 2) a person with training or experience in conducting commercial energy audits, or 3) a utility company representative with energy audit training. The cost of engineering services and audits may be included in the loan request.

CONVERSION CALCULATIONS FOR VEHICLES

For alternative fuel vehicle projects, a calculation demonstrating the Return on Investment (ROI) or payback period must be submitted with the application. Calculations can be made using online calculators. The ROI or payback period will factor highly in the approval process. Below are some recommended online calculators:

- http://www.cngnow.com/vehicles/calculator/Pages/information.aspx
- http://www.propane.tx.gov/

- http://www.eereblogs.energy.gov/cleancities/post/2013/11/15/top-20-facts-18.aspx

ELIGIBLE ENERGY EFFICIENCY MEASURES

Energy efficiency measures eligible under the Local Government Energy Loan Program include the following:

- Interior lighting retrofits
- Street and sports field lighting
- Traffic signals
- Heat recovery systems*
- Load management systems
- Energy management systems
- Electrical distribution systems (motors, variable speed drives, fans, etc.)
- Infiltration reduction or other building envelope improvements
- Boiler efficiency and central plant improvements
- Upgrading water treatment plants for energy efficiency, energy recovery, or both
- Heating, ventilating, and air conditioning (HVAC) equipment
- Renewable energy systems**
- Conversion of fleet vehicles to use CNG, LNG, or Propane
- Incremental cost for a new dedicated or bi-fuel CNG, LNG or Propane vehicle over that for a new traditional fueled vehicle
- Other cost effective energy retrofits as approved by the ADECA Energy Division

***Heat recovery systems should be designed with a BTU meter to evaluate recovered energy continuously.**

****Renewable energy systems will need a monitoring function to record energy produced by the system continuously.**

PROGRAM DETAILS

- Maximum loan amount is $350,000 for local governments, and public colleges and universities, and $350,000 per K-12 public school campus not to exceed $500,000 per school system (until the loan has been fully repaid).
- The minimum loan amount is $50,000.
- Loans will be closed after the following occurs: (1) retrofits are completed or vehicle conversions/purchases have been made, (2) the project has passed inspection conducted by the ADECA Energy Engineer, and (3) monitoring has been completed by the ADECA Energy Program Manager reflecting satisfactory performance.
- The maximum term of loan is ten years or less for building and lighting retrofits.
- The maximum term of loan is five years or less for alternative fuel vehicle projects.
- Loans may be repaid at any time with no prepayment penalty.
- Applications for buildings, water treatment plants and lighting systems must include an energy audit. Any eligible charges for an energy audit may be included in the loan amount.
- Applications for alternative fuel projects must include a ROI calculation.
- Applications for loans to cover the incremental cost of new alternative fuel vehicles must include a price quote from the dealer for the new alternative fuel vehicle and a price quote for a comparable traditional fuel vehicle to verify incremental estimates.
- At the loan closing, the borrower shall submit a Letter of Credit from a commercial bank or other form of security approved by the ADECA Energy Division. Any cost associated with the Letter of Credit may be included in the cost of the loan.
- PowerSouth will charge the borrower a ten percent (10%) late fee for amounts due on all accounts that are not paid within 30 days of billing.
- For building and lighting projects, loan recipients must provide the ADECA Energy Division with an Annual Energy Usage Report containing 12 months of energy usage data before project improvements (as part of the Energy Audit) and the first

twelve-month period following completion of the project. These reports can be generated using ENERGY STAR's Portfolio Manager or other industry accepted program. If the affected project area is less than the metered area, an explanation of each must be included in the Energy Audit in order to facilitate the assessment of project performance over the life of the loan. The applicant will be required to submit annual energy reports to the ADECA Energy Program Manager during the length of the loan.

- For alternative fuel vehicle conversion projects the loan recipient must provide the ADECA Energy Division with 12 months of fuel usage/cost data prior to vehicle conversion and actual usage/cost data for the first twelve-month period following completion of the project. Actual usage/cost data for the first twelve-month period following the purchase of dedicated or bi-fuel alternative fuel vehicles must be submitted along with a comparison of the industry standard for comparable traditional fueled vehicles. The applicant will be required to submit annual energy reports to the ADECA Energy Program Manager during the length of the loan.

PROCUREMENT RESPONSIBILITIES

Because the funding source for the Local Government Energy Loan Program has the same requirements for procurement as state funds and because eligible applicants are subject to the Alabama Competitive Bid and Public Works Laws as well as the Alabama Performance Contracting Act, eligible applicants must be able to document that their bid procedures are compliant with the applicable laws that govern the process chosen.

The Public Works Law requires sealed bids for projects over $50,000 and contains advertising requirements specific to counties and cities. The Public Works Law is located in the Alabama Code § 39-1-1 through § 39-7-34 for more detailed guidance.

The Performance Contracting Act requires Requests for Proposals prior to entering into a guaranteed energy cost savings contract. The Alabama Performance Contracting Act is located in the Alabama Code § 41-16-143 for more detailed guidance.

No materials, equipment or vehicles should be purchased prior to receiving loan approval.

DEFINITIONS

Alternative Fuels – Propane, Compressed Natural Gas (CNG) or Liquified Natural Gas (LNG).

Alternative Fuel Vehicle Projects – Conversion of fleet vehicle to use Propane, CNG or LNG. The incremental cost for a new dedicated or bi-fuel CNG, LNG or Propane vehicle over that for a new traditional fueled vehicle. The costs for fueling infrastructure are not covered. Ethanol (E85) projects may be considered upon request and will be reviewed on a case by case basis.

Benchmarking – An energy management tool that tracks energy and water consumption.

Bi-Fuel Vehicle – A vehicle with two separate fuel systems designed to run on either fuel, using only one fuel at a time.

Borrower – A participating local government, city or county board of education, or public college or university that has been approved by the ADECA Energy Division to apply for a revolving loan under the Local Government Energy Loan Program. The Borrower must qualify for financial loan acceptance by its local bank and PowerSouth in order to receive a Local Government Energy Loan Program loan.

Conversion Calculation – A calculation demonstrating the rate of Return on Investment (ROI) or payback period for converting vehicles to utilize alternative fuels.

Eligible Applicant - Eligible participants for the Local Government Energy Loan Program are municipal and county governments, public K-12 boards of education, colleges and universities in Alabama.

Eligible Property - Any property owned by a Borrower including buildings, water treatment

plants, street and traffic lighting, sports field lighting, fleet vehicles and other property determined as eligible by the ADECA Energy Division.

Energy Audits – A report that identifies and specifies energy savings and related cost savings that are likely to be realized as a result of modifying operations and maintenance procedures or by acquiring and installing one or more energy conservation measures in a building, water treatment plant or street lighting, traffic signals or sportsfield lighting. The Energy Audit must include at least 12 months of energy billing data and a breakdown of systems where annual energy is used categorically.

Energy Auditor – The energy auditor must be either 1) a registered Alabama engineer, 2) a person with training or experience in conducting commercial energy audits, or 3) a utility company representative with energy audit training.

Energy Efficiency Measure - A commercially available energy-efficient device, replacement or modification of an installation in a building, or other property as previously indicated which is intended to reduce energy consumption or allow the use of an alternative energy source.

Incremental Cost – The difference in the cost of a new dedicated or bi-fuel alternative fueled vehicle over the cost of a comparable traditional fueled vehicle.

Interest – The current interest rate for the loan program is zero percent (0%) for the life of the loan.

Payback Period - A numeric value derived from the total cost of energy efficiency measures (including installation, equipment and engineering design) divided by the estimated annual energy cost savings. The energy efficiency measures for buildings, water treatment plants, street lights, traffic signals and sports field lighting must demonstrate an average simple payback of 10 years or less. Alternative fuel vehicle projects must demonstrate a simple payback period of five years or less.

Public/Private Partnership - A joint financial venture between public and private entities for accomplishing a shared goal. Under the partnership, each entity is responsible for

implementing specified responsibilities according to the financial venture.

Qualified System Retrofitter (QSR) - a licensed technician certified by the manufacturer who holds the relevant emissions-related certifications and tampering exemptions. The QSR is accountable for the integrity of the conversion system components. Reference: Alternative Fuels Data Center (AFDC) Vehicle Conversion Basics website at (http://www.afdc.energy.gov/vehicles/conversions_basics.html).

Renewable Energy – Resources that are naturally replenished in a relatively short period of time, such as biomass, hydropower, geothermal, wind, and solar energy.

Reporting Requirement - Each entity funded through the Local Government Energy Loan Program shall submit an Annual Energy Use Report on all projects within 60 days of the close of the 12-month period following completion of the project. The report should contain 12 months of energy usage data before project improvements and the first 12-month period following completion of the project, except for dedicated or bi-fuel alternative fuel vehicle purchases, which shall include energy usage data for the first 12-month period following the purchase, compared to industry standards for comparable traditional fueled vehicles. A report form is provided in the application package, or one can be generated from ENERGY STAR's Portfolio Manager Program. **Annual Energy Usage Reports will be required for the life of the loan and must be submitted to the Program Manager at ADECA Energy Division.**

PROGRAM CONTACTS

For additional information on the Local Government Energy Loan Program, you may contact:

Jennifer Young, Program Manager
ADECA Energy Division
P. O. Box 5690
Montgomery, AL 36103-5690
jennifer.young@adeca.alabama.gov
(334) 353-3006

Victor Wyatt
PowerSouth
P. O. Box 550
Andalusia, AL 36420
victor.wyatt@powersouth.com
(334) 427-3228

HOW TO APPLY

Step 1. Identify the property and energy-using or energy-providing systems to be installed/implemented. For buildings, water treatment plants, street lighting, traffic signals or sports field lighting, calculate 12 months of energy/water consumption history and the energy intensity usage. These calculations determine energy savings potential. This information is available from your utility service provider.

*(The **ENERGY STAR Portfolio Manager Start-up Guide** provides instruction on how to set up a Portfolio Manager Account. An electronic copy of the **ENERGY STAR Portfolio Manager Start-Up Guide** can be found at http://www.adeca.alabama.gov/Divisions/energy/Pages/default.aspx.*
ENERGY STAR Portfolio Manager is a helpful tool in tracking energy savings in your buildings.)

For conversion of vehicles to use alternative fuels, calculate 12 months of fuel usage/cost data.

Step 2. Secure a copy of your organization's most recent certified financial statement.

Step 3. Determine the availability of a Letter of Credit from a commercial bank or other form of security for the loan that is acceptable to the ADECA Energy Division and PowerSouth.

Step 4. Have an energy audit performed by a qualified Energy Auditor. If the loan is approved, the cost of the energy audit may be included in the loan. For alternative fuel vehicle projects, have a calculation prepared demonstrating ROI. For vehicle purchase projects, provide a dealer price quote for the proposed alternative fuel vehicle and a price quote for a comparable traditional fuel vehicle.

Step 5. Complete and mail the **Loan Application** with the **Energy Audit Form or Conversion Calculation and vehicle price quotes (if applicable)** along with **the Energy Usage Report for the previous 12 months** to:

Ms. Jennifer Young, LGELP Program Manager
Alabama Department of Economic and Community Affairs
Energy Division
P. O. Box 5690
Montgomery, AL 36103-5690

Step 6. The ADECA Energy Division will notify all applicants of their loan approval status. No materials, equipment or vehicles should be purchased prior to receiving loan approval.

Step 7. Applicant must notify the ADECA Energy Division of any proposed changes to planned improvements, problems during construction, delays or other deviations to proposed project.

Step 8. Notify the ADECA Energy Division at least two weeks prior to project completion to schedule a monitoring visit and inspection by the ADECA Energy staff.

Step 9. **All energy improvements must be completed before loan closing.**

Step 10. A loan closing date will be set. You must present a Letter of Credit or other form of security approved by the ADECA Energy Division at the closing.

Step 11. **Annual Energy Usage Reports will be required for the life of the loan and must be submitted to the ADECA Energy Division Program Manager.**

Local Government Energy Loan Program
ENERGY AUDIT FORM

This form provides a preferred summary format for the Energy Audit that is required in the Local Government Energy Loan Program of the Alabama Department of Economic and Community Affairs' Energy Division. The audit consists of two parts: A. General Information and B. Energy Audit. **Submit a separate audit for each property targeted for retrofit**. Please complete ALL items on both pages, attach backup calculations and return to the ADECA Energy Division at the address on the last page. If you have any questions contact Jennifer Young at 334-353-3006.

PART A: GENERAL INFORMATION

Section A: Applicant and Property Information

1. Applicant Name:

2. Property Address:

3. City: 4. State: 5. ZIP:

6. Contact Person: 7. Telephone:

8. Type of Property: _____
(Select code from list)

a. Building
b. Street lights
c. Sports field lighting
d. Waste treatment plant
e. Traffic lights

9. Number of properties: _____
(Receiving retrofits/installation)

10. IF APPLICABLE Building Type: ___
(Select code from list)

a. Frame w/ siding
b. Concrete block
c. Block w/ brick
d. Metal or Aluminum
e. Stone
f. Concrete PIP
g. Other

11. Approximate Square Footage: _____ Gross _____ Heated

Section B: Energy Auditor Information

Note: Energy Auditor must be either 1) A registered Alabama engineer, 2) a person with training or experience in conducting commercial energy audits, or 3) a utility company representative with energy audit training.

1. Name: 2. Telephone:

3. Firm or Organization:

4. Mailing Address:

5. City: 6. State: 7. Zip:

8. AL Professional License or Registration Number:

9. Attach Statement of Qualifications for selected Energy Auditor

Section C: Certification

The undersigned hereby certifies that the information presented in this audit is a true and accurate representation of the energy characteristics of the applicant's property to the best of the energy auditor's knowledge.

Energy Auditor's Signature and Title (Please type or print title) Date Signed

PART B: ENERGY AUDIT

In this section provide information on the proposed project comparing it to the current energy usage to determine energy cost savings and a simple payback. Loans for recommended measures must be paid-off within ten (10) years.

1. **Date Audit Performed:**_____

2. Briefly, describe the **EXISTING** situation including the type of equipment and fuel that is being used.

3. Describe the situation **AFTER** implementation of the energy efficiency measures (EEMs) recommended. Note: if the EEMs save more than one type of energy, show calculations for each type separately.

4. **Energy Efficiency Measures (EEMs) Summary.** (List the identified EEMs including estimated costs and savings for each.)

Energy Efficiency Measures	Estimated Cost	Estimated Annual Savings ($)	Simple Payback

5. What is the estimated **date for completion** of this project? _____

6 **Energy Savings Data.** Existing Conditions vs. Recommended Changes (use whole numbers)

Fuel Type	Electricity		Natural Gas (cc ft)	LP Gas (Gal)	Annual Fuel Cost
	(kW)	(kWh)			
a. Existing					
b. Recommended					
c. Reduction					

d. Increase (or decrease) in maintenance costs resulting from this project: _____

e. Estimated total cost of installing the recommendations: _____

f. Overall Project Payback: _____ / _____ = _____ years

Total Project Cost / Annual Savings = Payback

Return this form with the application to:

ATTN: Jennifer Young
ADECA Energy Division
P.O. Box 5690
Montgomery, AL 36103-5690